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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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201	7590	02/23/2007	EXAMINER	
UNILEVER INTELLECTUAL PROPERTY GROUP 700 SYLVAN AVENUE, BLDG C2 SOUTH ENGLEWOOD CLIFFS, NJ 07632-3100			CHAWLA, JYOTI	
			ART UNIT	PAPER NUMBER
			1761	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE		DELIVERY MODE	
3 MONTHS	02/23/2007		PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/880,199	VERRIPS, CORNELIS THEODORUS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jyoti Chawla	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 November 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 6,12-14,19, 21-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 12-14, 19 and 22 is/are allowed.
- 6) Claim(s) 6,21,23-25 and 27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

Note: The examiner of the current application has changed. Please address all future correspondence to Jyoti Chawla, Art Unit 1761.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission of remarks filed on November 13, 2006 has been entered.

Claims 6, 12-14, 19, 21-25 and 27 remain pending. Independent claim 14, and those dependent therefrom, claims 12-13, 19 and 22 that were indicated as allowed, (Notice of Allowance dated September 13, 2004). Upon reconsideration of the subject matter as amended and claimed instantly, the allowance of claims 12-14, 19 and 22 has been withdrawn. The new rejection on the merits of these claims is presented in the office action below. Claims 6, 12-14, 19, 21-25 and 27 are rejected in the present office action.

**Minor Informality**

The applicant is requested to furnish dates of Publication of all the Non-patent Literature by providing the Title sheet and the printing or copyright date wherever missing in the documents provided to the office in the current application.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24-25, 27, 6, 21 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 24 recites "no substantial fermentation of the food product by said Lactobacillus bacteria will take place by said non-viable bacteria". As recited it is unclear whether lactobacillus bacteria stated above in claim 24 are viable or non-viable. Clarification and/ or correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(i) Claims 6, 24-25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Meister et al. (US PAT 6,010,725). Meister et al. is herein incorporated as cited at page 6 of the February 25, 2004 and February 8, 2006 Office actions.

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(ii) Claims 6, 12-14, 19, 21-22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Klaver et al. (US 5409718).

Klaver et al, hereinafter Klaver, teaches a dairy based food product comprising probiotic Lactobacillus bacteria, which have been rendered non-viable (Abstract). Klaver teaches addition of culture of Lactobacillus to the milk and culture it. It is known that all active bacterial cultures contain some non-viable bacteria, thus the reference teaches addition of active and non-viable lactobacillus to the milk. Klaver further teaches that the fully-grown culture of lactobacillus is heated in such a way that the all bacteria present are destroyed (i.e., rendered non-viable). Klaver also teaches that it is important that the culture be heated such that no living bacteria survive and also little or no enzymatic activity occurs after the heat treatment. Klaver further teaches that the heating time and temperature are chosen to have the same effect as heating for 85<sup>0</sup>C for 1 minute (Column 3, lines 15-35). Pasteurization is a well-known heat treatment aimed at inactivating enzymes and destroying 99-99.9% bacterial cells, and Klaver teaches the heat treatment of the food product containing the lactobacillus in order to destroy all lactobacillus (i.e., rendering non-viable) such that little or no enzyme activity can take place. Although Klaver does not call the heat treatment step as pasteurization, however, the reference does teach a heat treatment step that leads to the same results as expected by pasteurization, i.e., all bacteria are destroyed and no enzymatic activity which would lead to no substantial fermentation by the lactobacilli after the heat treatment. Thus Klaver reference teaches heat treatment, i.e., pasteurization and also teaches that no substantial fermentation by the lactobacillus will take place as recited in the claim 14.

Regarding claims 12 and 13, Klaver teaches heat treatment of food with lactobacillus in a way that all the bacteria present are destroyed (i.e., rendered non-viable) by the heat treatment (i.e., pasteurization as it is noted that pasteurization is a heat treatment to

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curb or reduce microbial activity and preserve food). Thus Klaver teaches of a ration of non-viable to viable bacteria more than 5:1 and 10:1 as claimed instantly.

Regarding claim 19 and 22, Klaver teaches of a dairy based food product that can be consumed as a healthy snack as recited by the applicant.

Regarding claims 24, Klaver teaches a food product comprising Lactobacillus bacteria (i.e., probiotic) and renders them non-viable by heat treatment to destroy all the bacteria after the addition of bacteria to the milk as discussed above regarding claim 14. Since the reference teaches of heat-treating the Lactobacillus containing food to destroy all the bacteria, and have little or no enzymatic activity, therefore the reference does teach that no substantial fermentation would take place by the non-viable bacteria as recited in claim 24. Also see the rejection above regarding claim 14.

Regarding claim 6 and 21, Klaver teaches of a dairy based food product that can be consumed as a healthy snack as recited by the applicant.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(A) Claims 6 and 21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Froseth et al. (US PAT 6,592,915), in view of Meister et al. (US PAT 6,010,725).

The rejection is herein incorporated as cited at pages 4-5 of February 8, 2006 Office action.

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(B) Claims 25 and 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klaver (US 5409718) in view of Dairy Science and Technology Handbook.

Klaver has been applied to claims 6, 12-14, 19, 21-22 and 24, 25 above.

Regarding claim 25, Klaver teaches of heat treatment of the milk containing lactobacillus culture in order to destroy the bacteria and inactivate enzymes as discussed above regarding claims 14 and 24. The reference further teaches of heating time and temperature that can be chosen to have the same effect as heating for 85°C for 1 minute (Column 3, lines 15-35) which would result in pasteurizing the food product and rendering the lactobacilli non-viable. Although Klaver does not refer to the heat treatment step as pasteurization, however, the reference does teach a heat treatment step that leads to the same results as expected by pasteurization, i.e., all bacteria are destroyed and no enzymatic activity which would lead to no substantial fermentation by the lactobacilli after the heat treatment. Pasteurization is a well-known heat treatment aimed at inactivating enzymes and destroying 99-99.9% bacterial cells. Furthermore, it has been known that pasteurizing a food for 30 seconds at 72°C is only one of several recommended time-temperature ranges at which the desired microbial destruction can be achieved. Pasteurization can be effectively performed at various other time-temperature ranges where, the time of exposure to elevated temperature is inversely proportional to the temperature of exposure, i.e., higher the temperature shorter exposure time required to achieve the similar results. Klaver reference teaches heating the lactobacillus milk culture for 85°C for 1 minute in order to render the lactobacilli non-viable and destroy the enzymes, (i.e., higher temperature and longer time than recited) (Column 3, lines 15-35), which will lead to at least the same level of bacterial non-viability and enzyme deactivation as expected by pasteurization for 30 seconds at 72°C, as recited in claim 25. Thus Klaver teaches a heat treatment to destroy the bacteria and enzymes as intended by the applicant and uses heat treatment to render the bacteria non-viable also as intended by the applicant. Furthermore, pasteurization is a well-known heat treatment aimed at inactivating enzymes and destroying 99-99.9% bacterial cells therefore , it would have been obvious to one of ordinary skill in the art at

the time of the invention that Klaver reference teaches rendering the bacteria non-viable by heating just as well as by pasteurization step for 30 seconds at 72<sup>0</sup>C, as instantly claimed.

Regarding claim 27, Klaver teaches a food product containing non-viable lactobacilli as discussed above. The reference teaches the amount of lactobacilli added to milk to form the culture should be as customary in traditional preparation of yogurt. The reference further teaches addition of 0.025 to 5% of lactobacilli (Column 3, lines 15-35). The reference, however, does not teach the amount of non-viable bacteria in the food product in cells or CFU as recited by the applicant in claim 27.

Dairy Science and Technology Handbook teaches inoculation for yogurt is generally done at the rate of 0.5 to 5% (page 26), as taught by Klaver. Dairy Science and Technology Handbook further teaches that the yogurt starter culture is added as a bulk starter containing 10<sup>8</sup> to 10<sup>9</sup> CFU/gram (page 23). Thus the bulk starter containing 10<sup>8</sup> to 10<sup>9</sup> CFU of bacteria /gram would fall in the range of 0.5-5% of bacterial cells added as culture. Since Klaver teaches the amount of bacteria as a percent of the medium inoculated in the same range as the Dairy Science and Technology Handbook, therefore it would have been obvious to one of ordinary skill in the art at the time of the invention that Klaver also teaches lactobacilli in the amount 10<sup>8</sup> to 10<sup>9</sup> CFU/gram, which falls within the range recited by the applicant. Therefore, Klaver teaches the amount of non-viable bacteria in the food as recited in claim 27.

(C) Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Froseth et al. (US PAT 6,592,915) in view of Klaver (US 5409718), taken as cited above. Note that Froseth et al. qualifies as prior art under 35 U.S.C. 102(e) and thus 35 U.S.C. 103(a).

Klaver has been applied to claims 6, 12-14, 19, 21-22 and 24 above.

Froseth et al. disclose the production of layered cereal bars containing ready-to-eat (RTE) cereal, wherein "the basic physical composition of the cereal bar is that of a 'sandwich' composed of two cereal layers with a visible center or middle layer, e.g., a creamy milk-filling layer." The bar may contain various components and additives, where it is stated that

Additives further include nutrient and health additives such as vitamins, minerals, encapsulated biologically active components, nutraceuticals..., dietary supplements, anti-oxidants, fibers, inulin, calcium carbonate, probiotic bacteria sprinkles (e.g., lactobacillus or acidophilus), energy additives, protein powders, powdered milk fractions, protein or satiety additives, herbs, aromatic substances, and other similar health-enhancing additives. [underlining added]

The use of milk powder in the cereal bar is mentioned throughout Froseth et al.

Klaver teaches of a food product containing heat destroyed (i.e., non-viable) Lactobacilli which can be concentrated and dried by spray drying (Column 4, lines 12-20). The reference teaches milk as the culture medium for lactobacilli (Column 3, lines 15-35), thus the spray-dried composition containing non-viable lactobacilli would be a milk based composition. The reference further teaches addition of the spray dried powder to milk for making other cultured foods (Column 4, lines 20-26). Thus the reference teaches that the powdered composition containing non-viable lactobacilli can be added to foods.

Thus, it would have been obvious for one of ordinary skill in the art to have utilized the known dried probiotic bacteria (*Lactobacillus*)-containing milk based food preparation of Klaver within the layered cereal bar of Froseth et al., which contained a "milk-filling layer", and which specifically suggested the use of "probiotic bacteria sprinkles (e.g., *lactobacillus* or *acidophilus*)", "powdered milk fractions," "and other similar health-enhancing additives." It would not have involved an inventive step for one skilled in the art to have utilized this known preparation. Thus, the combination of references reads upon the instantly-claimed invention.

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(D) Claims 6, 12-14, 19, 21-22, 24-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagisawa et al (JP 2000160263 A, English Abstract only) in view of review article by Ouwehand et al (Int. Dairy Journal 8 (1998) 749-758) of record.

Yanagisawa et al (JP 2000160263 A, English Abstract only), herein after Yanagisawa, teaches addition of dried and dead (non-viable) lactobacillus coccus (probiotic bacteria) and starch to soy milk, dissolving and dispersing the and then heating the composition to make it uniform, filling in a container for solidifying and then freezing it. Thus Yanagisawa teaches addition of non-viable lactobacillus to soymilk with the regular coagulant in order to make tofu. The dried bacterial culture would contain some live bacteria in addition to the dried and dead lactobaccilli as taught by Yanagisawa thus teaching the addition of viable and non-viable bacteria as recited in claims 14 and 24. After the addition of dried and dead lactobaccili the resultant mixture of soymilk, starch, coagulant etc., is heated (i.e., Pasteurized as pasteurization is a heat treatment for preservation of food) before filling in a container to solidify. Therefore, as taught by the abstract, no substantial fermentation of food product can take place because the main bacterial culture added consists of dried and dead lactobacilli (Claims 14 and 24) that has been further heat treated after being added to the culture medium (i.e., pasteurization as it is noted that pasteurization is a heat treatment to curb microbial activity and preserve food).

Regarding claims 14, 24 and 25, Yanagisawa abstract does not specifically teach the step of pasteurization however, the reference teaches heat-treating the composition to make it uniform, filling in a container for solidifying and then freezing. Although Yanagisawa does not refer to the heat treatment step as pasteurization, however, the reference does teach a heat treatment. Pasteurization was a well-known heat treatment aimed at inactivating enzymes and destroying 99-99.9% bacterial cells at the time of the invention. It was also known to pasteurize foods to reduce spoilage during storage and transportation. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the heat treatment as taught by Yanagisawa and heat the soymilk composition to a temperature and for a time period appropriate to

pasteurize the product. One would have been motivated to do so in order to make the product more shelf stable and reduce losses due to spoilage during transport and storage.

Regarding claims 12-13, since Yanagisawa abstract teaches addition of dried and dead (non-viable) lactobacilli, i.e., most bacteria in the dried composition are non-viable. The reference does not teach the proportion of non-viable to viable bacteria as recited in claims 12 and 13. However, use of non-viable probiotic bacteria in food has been known in the art as taught by Ouwehand article (Page 749, column 1) of record. Ouwehand teaches that number of viable bacteria in pasteurized yogurt is about 0-3.4% as compared to viable yogurt (Table 1, page 750) which is less than 10% and thus falls in the range recited by the applicant in claims 12 and 13. Ouwehand also teaches that non-viable probiotic compositions containing probiotic bacteria, such as, lactobacilli are advantageous over the live cultures as non-viable cultures have longer shelf-life and do not require special handling conditions.

Thus Yanagisawa teaches a culture of dried and dead lactobacilli, i.e., (non-viable) to be added to soymilk to make tofu. Yanagisawa does not teach the proportion of non-viable bacteria in the culture, however Ouwehand teaches that non-viable cultures have been known in the art for their beneficial effects. Ouwehand further teaches that the proportion of viable bacteria in pasteurized yogurt range between 0-3.4% as discussed above, i.e., the non-viable bacteria range from 94.6 to 100% or the proportion of non-viable to viable bacteria is more than 10:1 as recited in claims 12 and 13. Therefore, it would have been obvious to one of ordinary skill in the art to modify the dried culture of lactobacillus bacteria as taught by Yanagisawa to contain mostly non-viable bacteria, such that, the ratio of non-viable to viable lactobacilli in the dried sample that is added to soy milk would be more than 10:1 as taught by Ouwehand. Furthermore, one of ordinary skill would have been motivated to use a sample of dried lactobacilli that has more than 90% non-viable bacteria in order to obtain the probiotic benefit of the bacteria without the use of special handling conditions. One would have been further motivated to add the non-viable bacteria to the food product such as tofu in order to

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provide the probiotic benefit of the bacteria without any disadvantages (undesired fermentation and acidification) associated with the addition of a live and viable bacterial culture to the food product.

Tofu is a popular dietetic snack product, therefore the reference teaches the invention as recited in claims 6, 19, 21-22

Regarding claim 27, Yanagisawa abstract does not teach the amount of non-viable bacteria in the composition. Ouwehand, however teaches that a yogurt culture contains  $1 \times 10^8$  to  $8.5 \times 10^8$ /gram viable bacteria out of which about 96.6 to 100% are turned non-viable by pasteurizing the yogurt (Table 1, page 750). Thus the amount of non viable bacteria in a pasteurized yogurt culture is  $10^6$ - $10^8$ /gram, i.e.,  $10^8$  to  $10^{10}$  per 100 gram, which falls in the recited range of the applicant. Yanagisawa teaches addition of non-viable bacterial culture to soymilk for making tofu but the reference does not give the amount of non-viable bacteria in the food. Ouwehand teaches that pasteurized yogurt containing  $10^8$  to  $10^{10}$  of non-viable bacteria per 100 grams of yogurt produce beneficial probiotic effect when consumed with food. Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the amount of dried bacterial culture added to soymilk as taught by Yanagisawa to contain  $10^8$  to  $10^{10}$  of non-viable bacteria per 100 grams of final product, i.e., tofu to obtain the optimal benefit of the probiotic bacteria. One would have been further motivated to add such an amount to foods as regular intake of foods containing  $10^8$  to  $10^{10}$  of non-viable bacteria per 100 grams of final product, would result in inhibition of the binding of entero-pathogens to human intestinal cells and reduce the duration of intestinal problems, such as, diarrhoea.

***Response to Arguments***

Applicant's arguments with respect to claims 6, 12-14, 19, 21-25 and 27 submitted November 13, 2006 have been considered but are not deemed persuasive and the rejections are maintained for reasons of record.

I) On page 2 of the remarks, applicant argues that Meister reference does not teach pasteurization. Applicant further argues that "As pointed out previously, one of ordinary skill would not regard spray drying as a pasteurization method. Since the art recognizes a difference in the processes, it is logical to conclude that the result with respect to the bacteria will be different. This is borne out by the Office's inability to show that the bacteria in Meister et al. are not fermenting. Indeed, as pointed out before, the Office points to no indication that Meister et al. want bacterial which are substantially incapable of fermenting. The Office has not established that the Meister et al. bacteria will inherently (inevitably) produce the same effect; quite the contrary. Nor do Meister et al. lead one of ordinary skill in the direction of the Invention, which is recited in claim 24 since Meister et al. appear to want at least some viable bacteria to survive its drying step. Consequently, the invention is neither inherently disclosed nor taught by the cited art, and it is respectfully requested that the rejections be withdrawn."

In response to the applicant's argument that the Meister reference does not teach pasteurization, the applicant is referred to the definition of Pasteurization. American Heritage Dictionary defines pasteurization as the act or process of heating a beverage or other food, such as milk or beer, to a specific temperature for a specific period of time in order to kill microorganisms that could cause disease, spoilage, or undesired fermentation. Furthermore, Pasteurization is a heat processing method that is aimed at inactivating a large population (99-99.9%) of bacterial cells. Thus as stated in the office action above, pasteurization is a step or process where food is exposed to elevated

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temperature for certain period of time in order to kill microbes. In the present instance Meister et al. discloses that a culture of microorganisms is mixed with a liquid preparation of a food composition, such as milk, or one from meat, fruits or vegetables (col. 4), which is subsequently heated and spray-dried to form a dried food composition containing amounts of both viable and non-viable bacteria. The reference teaches that during spray drying the microbial composition is exposed to temperatures between 200-400<sup>0</sup>C (Abstract). The reference also teaches that it was known in the art that temperature range of 180-300<sup>0</sup>C for spray drying is capable of killing all the live organisms (Column 1, lines 19-24). Also the reference clarifies that for spray drying the air inlet temperature of 200-300<sup>0</sup>C or above is utilized however the droplet temperature remains from about 40-70<sup>0</sup>C. Meister et al do teach that the spray drying treatment is capable of destroying the microbial population, however, it can be modified such that some of the microbes remain alive, e.g., by rapid drying etc (Column 2, lines 1-50). As taught, since the inside temperature of the sprayed droplet taught by Meister is about the same as the temperature recited by the applicant in claim 25 for pasteurization, therefore, the effect of the two heat treatments will also be about the same. Thus, Meister et al do teach a heat treatment (i.e., spray drying) which is capable of destroying the microbial population by exposing the microbial culture to an internal temperature about 40-70<sup>0</sup>C for a certain time in order to dry the bacterial composition. Since dehydration or drying requires a longer exposure to heat than pasteurization at the same temperature, it would be inherent the effect of spray drying at the same temperature as recited in claim 25, will result in rendering the bacterial culture non-viable to about the same extent as would have been achieved by pasteurization at 72<sup>0</sup>C for 30 seconds as recited.

II) Applicant further argues that pasteurization and spray drying are two separate terms and procedures, however, spray drying as taught by Meister (on record) is accomplishing the function of rendering the bacterial population non-viable which is also the intent of the applicant. If the prior art structure (the spray dried bacteria) is capable of performing the claimed process and would reasonably meet the claimed property

limitations, which it does, then the claim is anticipated as stated. In other words, utilizing a bacteria pasteurized in line for 30 seconds at 72°C would not appear to patentably differ from those bacteria disclosed and utilized in the reference.

III) Regarding the argument that Meister does not teach that the bacteria are non-fermenting, applicants state "Applicants submit that the fact that the Office is unable to point to any indication by Meister et al. that the bacteria are not fermenting, belies the Office's contention that the bacteria would reasonably meet the claimed property limitations". This is not deemed persuasive for the reasons of record. Applicant may allege this, however, this does not accurately reflect the claimed invention, and thus does not directly pertain to the teachings of the reference, as well. The claimed invention specifically requires that "no substantial fermentation of the food product by said Lactobacillus bacteria will take place" in claim 14 and "no substantial fermentation of the food product by said Lactobacillus bacteria will take place by said non-viable bacteria" In claim 24. The claims do not exclude further acidification after addition of said non-viable bacteria to the food product (for example, by other bacteria in the composition), but rather only exclude such acidification as done "by said non-viable bacteria" only. Furthermore, in response to applicant's argument that the references fail to show certain features (i.e., no substantial fermentation) of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Chawla whose telephone number is (571) 272-8212. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jyoti Chawla  
Examiner  
Art Unit 1761



KEITH HENDRICKS  
PRIMARY EXAMINER